

In the Specification:

Please replace the previous specification filed and replace it with the attached "substitute specification".

Please amend the paragraph, beginning at page 66, line 10, as follows:

--Percent amino acid sequence identity may also be determined using the sequence comparison program NCBI-BLAST2 (Altschul et al., Nucleic Acids Res. 25:3389-3402 (1997)). ~~The NCBI-BLAST2 sequence comparison program may be downloaded from <http://www.ncbi.nlm.nih.gov>.~~ NCBI-BLAST2 uses several search parameters, wherein all of those search parameters are set to default values including, for example, unmask = yes, strand = all, expected occurrences = 10, minimum low complexity length = 15/5, multi-pass e-value = 0.01, constant for multi-pass = 25, dropoff for final gapped alignment = 25 and scoring matrix = BLOSUM62.--

Amend the paragraph, beginning at page 68, line 26, as follows:

--Percent nucleic acid sequence identity may also be determined using the sequence comparison program NCBI-BLAST2 (Altschul et al., Nucleic Acids Res. 25:3389-3402 (1997)). ~~The NCBI-BLAST2 sequence comparison program may be downloaded from <http://www.ncbi.nlm.nih.gov>.~~ NCBI-BLAST2 uses several search parameters, wherein all of those search parameters are set to default values including, for example, unmask = yes, strand = all, expected occurrences = 10, minimum low complexity length = 15/5, multi-pass e-value = 0.01, constant for multi-pass = 25, dropoff for final gapped alignment = 25 and scoring matrix = BLOSUM62.--

Amend the paragraph beginning at page 149, line 10, as follows:

--The extracellular domain (ECD) sequences (including the secretion signal sequence, if any) from about 950 known secreted proteins from the Swiss-Prot public database were used to search EST databases. The EST databases included public databases (e.g., Dayhoff, GenBank), and proprietary databases (e.g. LIFESEQTM, Incyte Pharmaceuticals, Palo Alto, CA). The search was performed using the computer program BLAST or BLAST2 (Altschul, and Gish,

Methods in Enzymology 266: 460-80 (1996); ~~http://blast.wustl.edu/blast/README.html~~) as a comparison of the ECD protein sequences to a 6 frame translation of the EST sequences. Those comparisons with a Blast score of 70 (or in some cases 90) or greater that did not encode known proteins were clustered and assembled into consensus DNA sequences with the program "phrap" (Phil Green, University of Washington, Seattle, Washington).--

Amend the paragraph, beginning at page 155, line 28 as follows:

--The EST sequence accession number AF007268, a murine fibroblast growth factor (FGF-15) was used to search various public EST databases (e.g., GenBank, Dayhoff, etc.) The search was performed using the computer program BLAST or BLAST2 Altschul et al., Methods in Enzymology, 266:460-480 (1996); ~~http://blast.wustl.edu/blast/README.html~~ as a comparison of the ECD protein sequences to a 6 frame translation of the EST sequences. The search resulted in a hit with GenBank EST AA220994, which has been identified as stratagene NT2 neuronal precursor 937230.--

Amend the paragraph, at page 168, line 28, as follows:

--The extracellular domain (ECD) sequences (including the secretion signal, if any) of from about 950 known secreted proteins from the Swiss-Prot public protein database were used to search expressed sequence tag (EST) databases. The EST databases included public EST databases (e.g., GenBank) and a proprietary EST DNA database (LIFESEQ™, Incyte Pharmaceuticals, Palo Alto, CA). The search was performed using the computer program BLAST or BLAST2 (Altschul et al., Methods in Enzymology 266:460-480 (1996)) as a comparison of the ECD protein sequences to a 6 frame translation of the EST sequence. Those comparisons resulting in a BLAST score of 70 (or in some cases 90) or greater that did not encode known proteins were clustered and assembled into consensus DNA sequences with the program "phrap" (Phil Green, University of Washington, Seattle, Washington; ~~http://bozeman.mbt.washington.edu/phrap.doos/phrap.html~~).--

Amend the paragraph, at page 179, line 1, as follows:

--The extracellular domain (ECD) sequences (including the secretion signal, if any) of from about 950 known secreted proteins from the Swiss-Prot public protein database were used to search expressed sequence tag (EST) databases. The EST databases included public EST databases (e.g., GenBank) and a proprietary EST DNA database (LIFESEQ™, Incyte Pharmaceuticals, Palo Alto, CA). The search was performed using the computer program BLAST or BLAST2 (Altschul et al., Methods in Enzymology 266:460-480 (1996)) as a comparison of the ECD protein sequences to a 6 frame translation of the EST sequence. Those comparisons resulting in a BLAST score of 70 (or in some cases 90) or greater that did not encode known proteins were clustered and assembled into consensus DNA sequences with the program "phrap" (Phil Green, University of Washington, Seattle, Washington; <http://bozeman.mbt.washington.edu/phrap.docs/phrap.html>).--

Amend the paragraph, at page 195, line 14 as follows:

--Twelve micrograms of the desired plasmid DNA were introduced into approximately 10 million CHO cells using commercially available transfection reagents ~~Superfect~~ SUPERFECT® (Quiagen), ~~Desper~~ DOSPER® or ~~Fugene~~ FUGENE® (Boehringer Mannheim). The cells were grown and described in Lucas *et al.*, supra. Approximately 3×10^{-7} cells are frozen in an ampule for further growth and production as described below.--

Amend the paragraph, at page 197, line 4 as follows:

--Recombinant baculovirus is generated by co-transfecting the above plasmid and ~~BaculoGold~~™ BACULOGOLD™ virus DNA (PharMingen) into *Spodoptera frugiperda* ("Sf9") cells (ATCC CRL 1711) using LIPOFECTIN® (commercially available from GIBCO-BRL). After 4-5 days of incubation at 28°C, the released viruses are harvested and used for further amplifications. Viral infection and protein expression is performed as described by O'Reilley et al., *Baculovirus expression vectors: A laboratory Manual*, Oxford: Oxford University Press (1994).--

Amend the paragraph, at page 197, line 32 as follows:

--Following PCR amplification, the respective coding sequences were subcloned into a baculovirus expression vector (pb.PH.IgG for IgG fusions and pb.PH.His.c for poly-His tagged proteins), and the vector and Baculogold® baculovirus DNA (Pharmingen) were co-transfected into 105 *Spodoptera frugiperda* ("Sf9") cells (ATCC CRL 1711), using ~~Lipofectin~~ LIPOFECTIN® (Gibco BRL). pb.PH.IgG and pb.PH.His are modifications of the commercially available baculovirus expression vector pVL1393 (Pharmingen), with modified polylinker regions to include the His or Fc tag sequences. The cells were grown in Hink's TNM-FH medium supplemented with 10% FBS (Hyclone). Cells were incubated for 5 days at 28°C. The supernatant was harvested and subsequently used for the first viral amplification by infecting Sf9 cells in Hink's TNM-FH medium supplemented with 10% FBS at an approximate multiplicity of infection (MOI) of 10. Cells were incubated for 3 days at 28°C. The supernatant was harvested and the expression of the constructs in the baculovirus expression vector was determined by batch binding of 1 ml of supernatant to 25 mL of Ni-NTA beads (QIAGEN) for histidine tagged proteins or Protein-A SEPHAROSE™ Sepharose CL-4B beads (Pharmacia) for IgG tagged proteins followed by SDS-PAGE analysis comparing to a known concentration of protein standard by Coomassie blue staining.--

Amend the paragraph, at page 206, line 10 as follows:

--PDB12 pancreatic ductal cells are plated on fibronectin coated 96 well plates at 1.5×10^3 cells per well in 100 μ L/180 μ L of growth media. 100 μ L of growth media with the PRO polypeptide test sample or negative control lacking the PRO polypeptide is then added to well, for a final volume of 200 μ L. Controls contain growth medium containing a protein shown to be inactive in this assay. Cells are incubated for 4 days at 37°C. 20 μ L of ~~Alamar-Blue~~ ALAMAR BLUE™ dye (AB) is then added to each well and the fluorescent reading is measured at 4 hours post addition of AB, on a microtiter plate reader at 530 nm excitation and 590 nm emission. The standard employed is cells without Bovine Pituitary Extract (BPE) and with various concentrations of BPE. Buffer or CM controls from unknowns are run 2 times on each 96 well plate.--

Amend the paragraph, at page 206, line 18 as follows:

--These assays allow one to calculate a percent decrease in protein production by comparing the ~~Alamar-Blue~~ ALAMAR BLUETM Dye calculated protein concentration produced by the PRO polypeptide-treated cells with the ~~Alamar-Blue~~ ALAMAR BLUETM Dye calculated protein concentration produced by the negative control cells. A percent decrease in protein production of greater than or equal to 25% as compared to the negative control cells is considered positive.--

Amend the paragraph, at page 221, line 10 as follows:

--The starting material for the screen was genomic DNA isolate d from a variety cancers. The DNA is quantitated precisely, *e.g.*, fluorometrically. As a negative control, DNA was isolated from the cells of ten normal healthy individuals which was pooled and used as assay controls for the gene copy in healthy individuals (not shown). The 5' nuclease assay (for example, ~~TaqManTM~~ TAQMANTM) and real-time quantitative PCR (for example, ~~ABI-Prizm 7700 Sequence Detection SystemTM~~ ABI PRIZM 7700 SEQUENCE DETECTION SYSTEMTM (Perkin Elmer, Applied Biosystems Division, Foster City, CA)), were used to find genes potentially amplified in certain cancers. The results were used to determine whether the DNA encoding the PRO polypeptide is over-represented in any of the primary lung or colon cancers or cancer cell lines or breast cancer cell lines that were screened. The primary lung cancers were obtained from individuals with tumors of the type and stage as indicated in Table 8. An explanation of the abbreviations used for the designation of the primary tumors listed in Table 8 and the primary tumors and cell lines referred to throughout this example are given below.--

Amend the paragraph, at page 221, line 20 as follows:

--The results of the ~~TaqManTM~~ TAQMANTM are reported in delta (Δ) Ct units. One unit corresponds to 1 PCR cycle or approximately a 2-fold amplification relative to normal, two units corresponds to 4-fold, 3 units to 8-fold amplification and so on. Quantitation was obtained using primers and a ~~TaqManTM~~ TAQMANTM fluorescent probe derived from the PRO polypeptide-encoding gene. Regions of the PRO polypeptide-encoding gene which are most

likely to contain unique nucleic acid sequences and which are least likely to have spliced out introns are preferred for the primer and probe derivation, e.g., 3'-untranslated regions. The sequences for the primers and probes (forward, reverse and probe) used for the PRO polypeptide gene amplification analysis were as follows:--

Amend the paragraph, at page 224, line 32 as follows:

--The 5' nuclease procedure is run on a real-time quantitative PCR device such as the ~~ABI Prizm 7700 Sequence Detection System~~TM ABI PRIZM 7700 SEQUENCE DETECTION SYSTEMTM. The system consists of a thermocycler, laser, charge-coupled device (CCD) camera and computer. The system amplifies samples in a 96-well format on a thermocycler. During amplification, laser-induced fluorescent signal is collected in real-time through fiber optics cables for all 96 wells, and detected at the CCD. The system includes software for running the instrument and for analyzing the data.--

Amend the paragraph, at page 228, line 24 as follows:

--The fluorometricly determined concentration was then used to dilute each sample to 10 ng/μl in ddH₂O. This was done simultaneously on all template samples for a single ~~TaqMan~~TM TAQMANTM plate assay, and with enough material to run 500-1000 assays. The samples were tested in triplicate with ~~TaqMan~~TM TAQMANTM primers and probe both B-actin and GAPDH on a single plate with normal human DNA and no-template controls. The diluted samples were used provided that the CT value of normal human DNA subtracted from test DNA was +/- 1 Ct. The diluted, lot-qualified genomic DNA was stored in 1.0 ml aliquots at -80°C. Aliquots which were subsequently to be used in the gene amplification assay were stored at 4°C. Each 1 ml aliquot is enough for 8-9 plates or 64 tests.--

Amend the paragraph, at page 248, line 9, as follows:

--The following materials have been deposited with the American Type Culture Collection, ~~12301 Parklawn Drive, Rockville, MD,~~ 10801 University Boulevard, Manassas, VA USA (ATCC):

Material	ATCC Dep. No.	Deposit Date
DNA32292-1131	ATCC 209258	September 16, 1997
DNA33094-1131	ATCC 209256	September 16, 1997
DNA33223-1136	ATCC 209264	September 16, 1997
DNA34435-1140	ATCC 209250	September 16, 1997
DNA27864-1155	ATCC 209375	October 16, 1997
DNA36350-1158	ATCC 209378	October 16, 1997
DNA32290-1164	ATCC 209384	October 16, 1997
DNA35639-1172	ATCC 209396	October 17, 1997
DNA33092-1202	ATCC 209420	October 28, 1997
DNA49435-1219	ATCC 209480	November 21, 1997
DNA35638-1141	ATCC 209265	September 16, 1997
DNA32298-1132	ATCC 209257	September 16, 1997
DNA33089-1132	ATCC 209262	September 16, 1997
DNA33786-1132	ATCC 209253	September 16, 1997
DNA35918-1174	ATCC 209402	October 17, 1997
DNA37150-1178	ATCC 209401	October 17, 1997
DNA38260-1180	ATCC 209397	October 17, 1997
DNA39969-1185	ATCC 209400	October 17, 1997
DNA32286-1191	ATCC 209385	October 16, 1997
DNA33461-1199	ATCC 209367	October 15, 1997
DNA40628-1216	ATCC 209432	November 7, 1997
DNA33221-1133	ATCC 209263	September 16, 1997
DNA33107-1135	ATCC 209251	September 16, 1997
DNA35557-1137	ATCC 209255	September 16, 1997
DNA34434-1139	ATCC 209252	September 16, 1997
DNA33100-1159	ATCC 209373	October 16, 1997
DNA35600-1162	ATCC 209370	October 16, 1997
DNA34436-1238	ATCC 209523	December 10, 1997
DNA33206-1165	ATCC 209372	October 16, 1997
DNA35558-1167	ATCC 209374	October 16, 1997
DNA35599-1168	ATCC 209373	October 16, 1997
DNA36992-1168	ATCC 209382	October 16, 1997
DNA34407-1169	ATCC 209383	October 16, 1997
DNA35841-1173	ATCC 209403	October 17, 1997
DNA33470-1175	ATCC 209398	October 17, 1997
DNA34431-1177	ATCC 209399	October 17, 1997
DNA39510-1181	ATCC 209392	October 17, 1997
DNA39423-1182	ATCC 209387	October 17, 1997
DNA40620-1183	ATCC 209388	October 17, 1997
DNA40604-1187	ATCC 209394	October 17, 1997
DNA38268-1188	ATCC 209421	October 28, 1997
DNA37151-1193	ATCC 209393	October 17, 1997
DNA35673-1201	ATCC 209418	October 28, 1997

DNA40370-1217	ATCC 209485	November 21, 1997
DNA42551-1217	ATCC 209483	November 21, 1997
DNA39520-1217	ATCC 209482	November 21, 1997
DNA41225-1217	ATCC 209491	November 21, 1997
DNA43318-1217	ATCC 209481	November 21, 1997
DNA40587-1231	ATCC 209438	November 7, 1997
DNA41338-1234	ATCC 209927	June 2, 1998
DNA40981-1234	ATCC 209439	November 7, 1997
DNA37140-1234	ATCC 209489	November 21, 1997
DNA40982-1235	ATCC 209433	November 7, 1997
DNA41379-1236	ATCC 209488	November 21, 1997
DNA44167-1243	ATCC 209434	November 7, 1997
DNA39427-1179	ATCC 209395	October 17, 1997
DNA40603-1232	ATCC 209486	November 21, 1997
DNA43466-1225	ATCC 209490	November 21, 1997
DNA43046-1225	ATCC 209484	November 21, 1997
DNA35668-1171	ATCC 209371	October 16, 1997
DNA77624-2515	ATCC 203553	December 22, 1998--

Amend the paragraph, at page 249, line 22, as follows:

--These deposit were made under the provisions of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purpose of Patent Procedure and the Regulations thereunder (Budapest Treaty). This assures maintenance of a viable culture of the deposit for 30 years from the date of deposit. The deposits will be made available by ATCC under the terms of the Budapest Treaty, and subject to an agreement between Genentech, Inc. and ATCC, which assures that all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of the pertinent U.S. patent, assures permanent and unrestricted availability of the progeny of the culture of the deposit to the public upon issuance of the pertinent U.S. patent or upon laying open to the public of any U.S. or foreign patent application, whichever comes first, and assures availability of the progeny to one determined by the U.S. Commissioner of Patents and Trademarks to be entitled thereto according to 35 USC § 122 and the Commissioner's rules pursuant thereto (including 37 CFR § 1.14 with particular reference to 886 OG 638).--